Please replace the paragraph at page 3, lines 12 through 17 with the following paragraph:

--According to another aspect of the invention, a novel is provided which can be incorporated into either the 3' or 5' terminus of a DNA oligomer. This label has the formula

$$P^{11}0$$
 OP^{12}
 H_3C
 CH_3

wherein P¹¹ and P¹² are independently selected from the group consisting of hydrogen, a protecting group, and a phosphodiester-forming group.--

Please replace the paragraph at page 14, lines 7 through 18 with the following paragraph:

--As shown in Fig. 1C, when N=2, the disulfide bond of 1 cleaves under neutral or basic conditions in the presence of DTT to give an oligonucleotide 2, which possess the 2-mercaptoethyl phosphate ester at the 3'-end. This ester fragments efficiently to produce the 3'-phosphorylated oligonucleotide 3. This produce has been shown to be identical to that produced by the base catalyzed cleavage of oligonucleotides tethered to the surface via the known Phosphate-ON reagent (Glen Research). The unsymmetrical disulfide linker when N=2 is preferred when it is desirable to cleave from the surface and analyze the oligonucleotides by HPLC, since the resultant oligonucleotides do not possess a

3'-thiol appendage. In the cases where N>2, the mercaptoalkyl esters should be more stable and the cleaved oligonucleotides retain the corresponding thiol appendage. This makes subsequent analysis of the cleaved DNA more difficult because of oxidation of the thiol group.--

Please replace the paragraph at page 25, line 18 through page 26, line 2 with the following paragraph:

--The oil was dissolved in 50 mL of 20% THF in anhydrous MeOH and a catalytic amount of K₂CO₃ was added. The mixture was stirred at room temperature overnight. EtOAc (50 mL) was added and the resulting mixture was poured into 50 mL of saturated aqueous NaHCO₃. The layers were separated and the aqueous portion was extracted with two 50 mL portions of ethyl acetate. The combined organic portions were washed with saturated aqueous NaCl and dried over anhydrous Na₂SO₄. Evaporation of the solvent provided the crude product as an orange oil. Purification was carried out by flash chromatography (hexane/EtOAc, 3/7 with 1% triethylamine) to provide 2.65g (73% for the two steps) of product 16 as a pale yellow oil.--

Amendments to the specification are indicated in the attached "Marked Up Version of Amendments" (pages i - iii).

In the Claims

Please cancel Claims 1-9 and 11-22.

Please amend Claim 10.

10. (Amended) A method of synthesizing an array of diverse small ligand molecules on a solid support having optional spacers, said small ligand molecules being removable